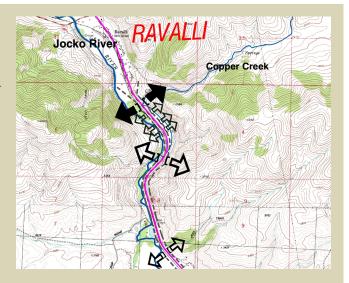
US 93 Design Discussions Wildlife Crossing Workbook

US 93 FISH AND WILDLIFE CROSSINGS

23. Copper Creek Fish & Wildlife Crossing Arlee - Ravalli Segment

This area has great significance for fish and wildlife crossing. The Jocko River is bull trout bearing. Two tributaries in this area, Copper Creek and Spring Creek have been altered by highway fills and embankments. Restoring these water channels will greatly improve fish and wildlife habitat. Raising the road in concert with providing undercrossings, would improve motorist safety and allow wildlife to move through the canyon. Anticipated use by: black bears, grizzly bears, mountain lions, bobcats, coyotes, elk, deer, etc.



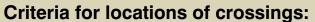
Design Recommendations

Recommended crossing type: *Open span bridge* Approximate dimensions: *100' to 150' span, 12' min. ht.*

Notes:

End 8' page wire fencing south of Ravalli. Begin fencing south of Schall Flats #4 crossing. Fencing on west side of road to be placed below sight line. Jump-outs are desirable adjacent to bridge structure as studies have shown that animals trapped inside R.O.W. will turn back rather than cross structures.

Mitigation in this area will require coordination between CSKT, MDT, and MRL to ensure appropriately sized companion crossings (across railroad) for fish, wildlife and hydrology.



- 1. Winter tracking NA.
- 2. Summer Game Trails NA.
- 3. Road Kill Data Tribal data from 1/95-10/98 combined with MDT data from 12/97-1/00 indicates an extremely high concentration of kills in this area (31 kills).
- 4. **Habitat** The road bisects two areas of good mountain habitat, and runs adjacent to excellent riparian habitat (the Jocko River) fed by two tributaries (Spring Creek and Copper Creek). These tributaries increase the fish and wildlife habitat value.
- 5. **Engineering Practicality** The physical constraints of this canyon pose a challenge.







US 93 DESIGN DISCUSSIONS

Project Committee

Evaro to Polson, Montana

Montana Department of Transportation Federal Highway Administration

The Confederated Salish & Kootenai Tribes of the Flathead Nation

Prime Consultant: Skillings-Connolly, Inc. - Consulting Engineers



December 20, 2000 23